#### PATENT COOPERATION TREATY

## From the RECEIVING OFFICE SUSAN M. DADIO BURNS, DOANE, SWECKER & MATHIS, LLP NOTIFICATION OF THE INTERNATIONAL P. O. BOX 1404 APPLICATION NUMBER AND OF THE ALEXANDRIA, VIRGINIA 22313-1404 INTERNATIONAL FILING DATE (PCT Rule 20.5(c)) Date of mailing 07 Jun 2005 (day/month/year) Applicant's or agent's file reference IMPORTANT NOTIFICATION 034136-022 Priority date (day/month/year) International filing date (day/month/year) International application No. 26 Mar 2004 25 Mar 2005 PCT/US05/10214 Applicant LUNA INNOVATIONS INCORPORATED Title of the invention PHOTOVOLTAIC DEVICE WITH TRIMETASPHERES The applicant is hereby notified that the international application has been accorded the international application number and the international filing date indicated above. The applicant is further notified that the record copy of the international application: 07 Jun 2005 was transmitted to the International Bureau on |x| has not yet been transmitted to the International Bureau for the reason indicated below and a copy of this notification has been sent to the International Bureau\*: because the necessary national security clearance has not yet been obtained. because (reason to be specified): The International Bureau monitors the transmittal of the record copy by the receiving Office and will notify the applicant (with Form PCT/IB/301) of its receipt. Should the record copy not have been received by the expiration of 14 months from the priority date, the International Bureau will notify the applicant (Rule 22.1(c)). Completed by: FL FOREIGN TRANSMITTAL LICENSE INFORMATION Additional license for foreign transmittal not required. This subject matter is covered by a license already granted or the equivalent U.S. national application. Refer to that license for information concerning its scope. License for foreign transmittal not required. 37 CFR. 5.11(e)(1) or 37 CFR 5.11(e)(2). However, a license may be required for additional subject matter. See 37 CFR 5.15(b). 02 Jun 2005 Foreign transmittal license granted. 35 U.S.C. 184; 37 CFR 5.11 on (date)

37 CFR 5.15(b)

Authorized officer

Felicia Lawrence

Telephone No. 708-308-9290 EX 133

Facsimile No. 703-305-3230 Form PCT/RO/105 (July 1992)

37 CFR 5.15(a)

Name and mailing address of the receiving Office Mail Stop PCT, Commissioner for Patents

P.O. Box 1450, Alexandria, VA 22313-1450

## Original (for SUBMISSION )

0	For receiving Office use only	
0-1	International Application No.	
0-2	International Filing Date	
0-3	Name of receiving Office and "PCT International Application"	
0-4	Form PCT/RO/101 PCT Request	
0-4-1	Prepared Using	PCT-SAFE [EASY mode] Version 3.50 (Build 0002.163)
0-5	Petition	
	The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	United States Patent and Trademark Office (USPTO) (RO/US)
0-7	Applicant's or agent's file reference	034136-022
ı	Title of Invention	PHOTOVOLTAIC DEVICE WITH TRIMETASPHERES
H	Applicant	
II-1	This person is	applicant only
II-2	Applicant for	all designated States except US
II-4 .	Name	LUNA INNOVATIONS INCORPORATED
11-5	Address	2851 Commerce Street Blacksburg, Virginia 24060 United States of America
II-6	State of nationality	
11-7	State of residence	US
11-8	Telephone No.	US
II-9	Facsimile No.	540.552.5128
		540.951.0760
III-1 III-1-1	Applicant and/or inventor This person is	
III-1-1 III-1-2	Applicant for	applicant and inventor
		US only
III-1-4	Name (LAST, First)	PHILLIPS, J., Paige
III-1-5	Address	2539 12 O'Clock Knob Road Salem, Virginia 24153 United States of America
III-1-6	State of nationality	us
111-1-7	State of residence	us

## Original (for SUBMISSION)

III-2	Applicant and/or inventor	
III-2-1	This person is	applicant and inventor
111-2-2	Applicant for	US only
111-2-4	Name (LAST, First)	TOPASNA, Daniela, M.
III-2-5	Address	12 Poyntz Place Lexington, Virginia 24450 United States of America
III-2-6	State of nationality	US
III-2-7	State of residence	us
111-3	Applicant and/or inventor	
III-3-1	This person is	applicant and inventor
III-3-2	Applicant for	US only
III-3-4	Name (LAST, First)	STEVENSON, Steven, A.
III-3-5	Address	508 Alleghany Street Blacksburg, Virginia 24060 United States of America
III-3-6	State of nationality	us
III-3-7	State of residence	us
111-4	Applicant and/or inventor	
III-4-1	This person is	applicant and inventor
III-4-2	Applicant for	US only
111-4-4	Name (LAST, First)	DESCHATELETS, Pascal
111-4-5	Address .	11031 Indian Legends Drive, #202 Louisville, Kentucky 40241 United States of America
111-4-6	State of nationality	CA
III-4-7	State of residence	us
111-5	Applicant and/or inventor	
	Applicant and/or inventor	
III-5-1	This person is	applicant and inventor
III-5-1 III-5-2	, · ·	applicant and inventor US only
	This person is	\
111-5-2	This person is Applicant for	US only
III-5-2 III-5-4	This person is Applicant for Name (LAST, First)	US only KOENE, Bryan 1835 Augusta National Road Blacksburg, Virginia 24060
III-5-2 III-5-4 III-5-5	This person is Applicant for Name (LAST, First) Address	US only KOENE, Bryan 1835 Augusta National Road Blacksburg, Virginia 24060 United States of America

## Original (for SUBMISSION)

IV-1	Agent or common representative; or address for correspondence	
	The person identified below is hereby/ has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent
IV-1-1	Name (LAST, First)	DADIO, Susan, M.
IV-1-2	Address	Burns, Doane, Swecker & Mathis, LLP P. O. Box 1404 Alexandria, Virginia 22313-1404 United States of America
IV-1-3	Telephone No.	703.836.6620
IV-1-4	Facsimile No.	703.836.2021
IV-1-6	Agent's registration No.	40,373
IV-2	Additional agent(s)	additional agent(s) with same address as first named agent
IV-2-1	Name(s)	KILLIAN, Jeffrey, G. (50,891)
$\overline{\mathbf{v}}$	DESIGNATIONS	
V-1	The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.	
VI-1	Priority claim of earlier national application	
VI-1-1	Filing date	26 March 2004 (26.03.2004)
VI-1-2	Number	60/556,435
VI-1-3	Country	us
VI-2	Priority document request	
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1
VII-1	International Searching Authority Chosen	United States Patent and Trademark Office (USPTO) (ISA/US)

# Original (for SUBMISSION)

VIII	Declarations '	Number of declarations	
VIII-1	Declaration as to the identity of the inventor	-	
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	-	
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application		
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	-	
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty		
IX	Check list	number of sheets	electronic file(s) attached
IX-1	Request (including declaration sheets)	5	✓
IX-2	Description	8	_
IX-3	Claims	5	_
IX-4	Abstract	1	<b>√</b>
IX-5	Drawings	3	_
IX-7	TOTAL	22	
	Accompanying Items	paper document(s) attached	electronic file(s) attached
IX-8	Fee calculation sheet	/	_
IX-17	PCT-SAFE physical media	-	<b>✓</b>
IX-18	other	Transmittal Letter, Postcard, Check	
IX-19	Figure of the drawings which should accompany the abstract	1	
IX-20	Language of filing of the international application	English	
X-1	Signature of applicant, agent or common representative	Ausan of To	2:
X-1-1	Name (LAST, First)	DADIO, Susan, M.	
X-1-2	Name of signatory		•
X-1-3	Capacity		

## Original (for SUBMISSION)

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/US
10-6	Transmittal of search copy delayed until search fee is paid	
	FOR INTE	ERNATIONAL BUREAU USE ONLY
11-1	Date of receipt of the record copy by the International Bureau	

PCT (ANNEX - FEE CALCULATION SHEET)

Original (for SUBMISSION)

(This sheet is not part of and does not count as a sheet of the international application)

0	For receiving Office use only			
0-1	International Application No.			
0-2	Date stamp of the receiving Office			
0.4	Face POT/PO/404 (Assess)	<del></del>		
0-4	Form PCT/RO/101 (Annex) PCT Fee Calculation Sheet			
0-4-1	Prepared Using	DOT-CARE FRACE	v modol	
0 1 1	Topared Sanig	PCT-SAFE [EASY mode] Version 3.50 (Build 0002.163)		
0-9	Applicant's or agent's file reference	034136-022	(Bulla 0002.10	<i>3</i>
2	Applicant		ONS INCORPORAT	ED
12	Calculation of prescribed fees	fee amount/muliplier	Total amounts (USD)	
12-1	Transmittal fee T	5	300	
12-2-1	Search fee S		1000	
12-2-2		□ □	1000	
	•	บร		
12-3	International filing fee (first 30 sheets) i1			
12-4		1131		
12-4	Remaining sheets Additional amount (X)	0		
		0		
12-6	Total additional amount i2	0	,	
12-7	i1 + i2 = i	1134		
12-12	EASY Filing reduction R	-81		
12-13	Total International filing fee (i-R)	₽	1053	
12-14	Fee for priority document			
	Number of priority documents requested	1		
12-15	Fee per document (X)	20		
12-16	Total priority document fee: P	c>	20	
12-17	TOTAL FEES PAYABLE (T+S+I+P)	⊏\$	2373	
12-19	Mode of payment	cheque		
12-20	Deposit account instructions			
	The receiving Office	United States Patent and Trademark Office (USPTO) (RO/US)		ademark
12-20-2	Authorization to charge any deficiency or credit any overpayment in the total fees indicated above			
12-21	Deposit account No.	02-4800		· · · · · · · · · · · · · · · · · · ·
12-22	Date	25 March 2005	(25.03.2005)	
12-23	Name and signature	<del></del>	м.	· · · · · · · · · · · · · · · · · · ·
		Suran H.	20	